REMARKS/ARGUMENTS

Claim 1-54 were initially pending. Claims 1, 10, and 40-42 are amended. Claims 13, 27-39, and 48-50 are canceled without prejudice. No claims are added. Accordingly, claims 1-12, 14-26, 40-47, and 51-54 remain pending.

Withdrawal of the outstanding rejections and/or objections to the pending claims is respectfully requested.

35 USC §102(e) Rejections

Claim 40 stands rejected under 35 USC §102(e) as being anticipated by U.S. Patent no. 6,510,406 to Marchisio. This rejection is traversed.

As a preliminary matter, reasons why Marchisio does not anticipate claim 40 were already discussed in the Appeal Brief dated February 17, 2004. Those arguments are not repeated verbatim herein, but rather are incorporated by reference. The Office is urged to reconsider those arguments in view of the following arguments.

A fundamental aspect of 35 USC §102(b) is that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Marchisio does not expressly or inherently describe each and every feature of claim 40 for the following reasons.

Claim 40 recites "a crawler module coupled to access a media content source and collect a plurality of media content pieces from the media content source, the media content pieces comprising text and one or more different types of media content that are not text", "a classifier module coupled to classify the one or more different types as meaningful or not meaningful such that if a piece of the

one or more different types is an image, the image is determined to be meaningful as a function of one or more of a color histogram, size, and image semantics", "a feature extraction module coupled to extract, for a piece of the one or more different types and from the one or more of the media content pieces and as a function of whether text is determined to be meaningful, text comprising one or more keywords associated with the piece", and "a media content indexing module coupled to generate, for the piece, a text feature vector identifying, for each keyword of the keywords, a first frequency that the keyword is used in the text, and a second frequency indicating frequency that the keyword is used with respect to any other ones of the one or more different types of media content." Nowhere does Marchisio describe these claimed features.

In addressing claim 40, the Action admits that Marchisio does not expressly describe the claimed "crawler module", as claim 40 recites. Rather, the Action concludes that this admittedly missing feature is inherent in the description of Marchisio in col. 8, line 64 through col. 9, line 6, and col. 18, line 58 through col. 19, line 13. This conclusion is unsupportable.

The Office has not met the burden necessary to present a prima facie case of anticipation based on inherency with respect to this feature of claim 40, which the Action clearly admits Marchisio does not expressly describe. MPEP §2131 describes the burden that the Action needs to show when asserting that a characteristic not expressly disclosed in the reference is inherent. "[W]hen the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of

ordinary skill." (Emphasis added). With respect to necessarily present descriptive matter, the MPEP §2163 clearly states "[i]nherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient."

Now, let's take a look at those portions cited by the Action to reject the claimed feature of "a crawler module", exemplary operations of which are clearly described in Applicant's specification at page 7, lines 8-16. Marchisio at col. 8, line 64 through col. 9, line 6 recites:

"Further as illustrated in FIG. 2, the indexing module 20 performs steps to reduce the original documents 27 and a query received from one of the clients 21 into symbolic form (i.e. a term-document matrix and a query vector, respectively). The steps performed by the indexing module 20 can be run in batch mode (when indexing a large collection of documents for the first time or updating the indices) or on-line (when processing query tokens). The disclosed architecture allows extensibility of the indexing module 20 to media other than electronic text."

Clearly, this cited portion of Marchisio describes indexing operations to reduce a document and a query into a document matrix and a query vector. Nowhere does this description of Marchisio indicate, or even remotely imply, that these indexing operations necessarily require "a crawler module" to be present, and that such a requirement of necessary presence would be so recognized by a person of ordinary skill in the art at the time of the invention.

Moreover, Marchisio at col. 18, line 54 through col. 19, line 13, was also cited by the Action to reject the claimed feature of "a crawler module". Let's take a close look at that particular cited portion of Marchisio:

"The disclosed information retrieval technology may form the basis for a tool referred to as a "semantic interpreter". The semantic interpreter summarizes evolutionary trends in news articles, and

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performs categorization of speech or on-line chat monitoring. It is a browsing tool which allows a user to rapidly compare the content of a current document set to some earlier document set, and/or determine or summarize conceptual trends in a conversation. As illustrated in FIG. 12, the semantic interpreter may perform a search combining a series of terms (query 120) with one or more tag filters 122. The tag filters 122, for example, identify different time intervals corresponding to creation or modification times associated with various ones of the electronic text files or other types of input documents. The tag filters 122 may further indicate specific participants in a conversation, or other identifiable characteristics of specific ones of the input documents represented by the termdocument matrix 123. The matrix 123 is subset or partitioned by the subsetting module 124, using tag specification(s) 122, and the inverse inference engine provides concept feedback specific to each of the partitions A 126, B 127, and C 128. This mechanism allows the user to compare the content of a current document set to some earlier document set, and determine conceptual trends. Input to the semantic interpreter could be electronic text from the Web, an electronic database, or digitized speech from a speech recognizer."

This cited portion of Marchisio describes that a browsing tool, which leverages a search operation using query term filters, is used to compare documents and/or determine trends in a conversation. Clearly, such a browsing tool to leverage a search operation to compare documents and/or determine trends in a conversation is not "a crawler module", as claim 40 recites. This description of Marchisio is completely silent, and does not even remotely imply, that the document comparison or query-based search operations of Marchisio require "a crawler module" (as claim 40 recites) to be present, and that such a requirement of necessary presence would be so recognized by a person of ordinary skill in the art at the time of the invention.

In view of the above, nowhere does Marchisio explicitly or inherently describe "a crawler module", as claim 40 recites. Moreover, the Action does not fill this gap in Marchisio with any extrinsic evidence that makes clear that the

missing descriptive matter is necessarily present in Marchisio, and that it would be so recognized by persons of ordinary skill. Again, mere probabilities or possibilities that a certain thing may result from a given set of circumstances is not sufficient.

Accordingly, the Action does not present a prima facie case of anticipation of claim 40. For this reason alone, the 35 USC §102 rejection of claim 40 is improper and should be withdrawn.

As an additional matter, to provide a missing feature of claim 40, the Action seemingly relies on personal knowledge without pointing to any specific teaching or suggestion. Specifically, after admitting that Marchisio does not explicitly describe "a crawler module", as claim 40 recites, the Action asserts on page 4 that "[i]t is clear that the claimed provision is inherent". For the reasons already discussed, Marchisio does not explicitly or inherently describe this claimed feature. Thus, the modification urged by the Action is seemingly relying on personal knowledge of the Examiner.

According to 37 CFR §1.104(d)(2), "[w]hen a rejection in an application is based on facts within the personal knowledge of an employee of the office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons."

In view of the above, if this rejection of the feature of "a crawler module", as claim 40 recites is maintained on a similar basis in a subsequent action, the Examiner is respectfully requested to supply such an affidavit subject to

contradiction or explanation by the affidavits of the applicant and other persons to support this otherwise unsupported modification to Marchisio.

In yet another additional matter, the Action at page 4, after asserting that the admittedly missing feature is inherent in Marchisio, the Action then concludes the following: "Nonetheless, to expedite prosecution, even if the limitation of the above were not inherent, it would have been obvious to one of ordinary skill in the art at the time of invention was made to include such a crawler to search and retrieve input documents (27, Fig. 2, Marchisio) or electronic text from the web (col. 19, lines 10-13, Marchisio) as the most commonly use of the crawler." Thus conclusion is unsupportable.

Firstly, the Office is respectfully reminded that this claim is rejected under 35 USC §102(e), not under a statutory obviousness rejection. Under 35 USC §102(e), "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference" (MPEP §2131). Thus, the Action's suggested modification to Marchisio, with what again appears to be personal knowledge of the Examiner, is not an element of a 35 USC §102 rejection. Secondly, inherency of a missing characteristic "may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient" (MPEP §2163).

For these additional reasons, the 35 USC §102 rejection of claim 40 should be withdrawn.

Moreover, claim 40 recites additional features not described by Marchisio. For example, claim 40 recites "collect a plurality of media content pieces from the media content source, the media content pieces comprising text and one or more

different types of media content that are not text". Nowhere does Marchisio describe this claimed feature,

It is respectfully submitted that Marchisio at col. 6, lines 55-58, describes "generates a term-document matrix (also referred to as "information matrix") based on the contents of [parsed] electronic document files". The parsed document files contain text (col. 6, lines 39-40). Clearly this portion of Marchisio describes that text documents are used. Marchisio further describes at col. 19, lines 10-13 that "[i]nput to the semantic interpreter could be electronic text from the Web, an electronic database, or digitized speech from a speech recognizer." (Emphasis added). The term "or" does not mean "and". Thus, nowhere does Marchisio describe a semantic interpreter to "collect a plurality of media content pieces from the media content source, the media content pieces comprising text and one or more different types of media content that are not text", as claim 40 recites.

For this additional reason, the 35 USC §102(e) rejection of claim 40 should be withdrawn.

Additionally, claim 40 recites further features not described by Marchisio. For example, claim 40 also recites, "a classifier module coupled to classify the one or more different types as meaningful or not meaningful such that if a piece of the one or more different types is an image, the image is determined to be meaningful as a function of one or more of a color histogram, size, and image semantics", "a feature extraction module coupled to extract, for a piece of the one or more different types and from the one or more of the media content pieces and as a function of whether text is determined to be meaningful, text comprising one or

 more keywords associated with the piece". The Action at page 12 admits that Marchisio does not describe image media content.

For this additional reason, the 35 USC §102(e) rejection of claim 40 should be withdrawn.

Additionally, claim 40 recites further features not described by Marchisio. For example, claim 40 also recites, "a feature extraction module coupled to extract, for a piece of the one or more different types and from the one or more of the media content pieces and as a function of whether text is determined to be meaningful, text comprising one or more keywords associated with the piece", and "a media content indexing module coupled to generate, for the piece, a text feature vector identifying, for each keyword of the keywords, a first frequency that the keyword is used in the text, and a second frequency indicating frequency that the keyword is used with respect to any other ones of the one or more different types of media content." It is respectfully submitted that Marchisio is completely silent with respect to the claimed features.

For this additional reason, the 35 USC §102(e) rejection of claim 40 should be withdrawn.

Claims 10-26 stand rejected under 35 USC §102(e) as being anticipated by U.S. Patent No. 6,282,549 to Hoffert et al ("Hoffert"). This rejection is traversed.

Claim 10 recites "identifying a media content source", "collecting one or more pieces of non-text media content and associated text from the media content source", "classifying the one or more of non-text media content as meaningful or not meaningful such that if a piece of the non-text media is an image, the image is determined to be meaningful as a function of one or more of color content, size,

and image content", "extracting, for a piece of non-text media content classified as being meaningful, one or more text features from the associated text", and "making the one or more text features available for searching." Hoffert does not expressly or inherently describe each and every one of these claimed features for the following reasons.

In addressing these claimed features, the Action at page 6, and with respect to the features of canceled claim 13 that have been moved by Applicant into claim 10, asserts that Hoffert at col. 18, lines 40-45, and col. 21, lines 14-26, describes classifying media content as meaningful or not meaningful, and extracting, for a piece of media content classified as being meaningful, one or more text features from the associated text. Applicant disagrees.

Nowhere does Hoffert at describe "classifying the one or more of non-text media content as meaningful or not meaningful such that if a piece of the non-text media is an image, the image is determined to be meaningful as a function of one or more of a color histogram, size, and image semantics" as claim 10 recites, and as clearly described in Applicant's specification. Instead, Hoffert expressly describes at col. 8, lines 1-3, that "the present invention is generally concerned with indexing two types of media files (i) audio 102 and (ii) video." At most Hoffert classifies a digital or audio file as being music, speech, or a combination of the two (col. 18, lines 40-45). Classifying something as music or speech simply means that data is determined to be music or speech, not determined to be "meaningful" in the context of claim 10.

Additionally, Hoffert at col. 21, lines 21-26 (cited by the Action at page 6) does not teach "classifying the one or more of non-text media content as meaningful or not meaningful such that if a piece of the non-text media is an

image, the image is determined to be meaningful as a function of one or more of a color histogram, size, and image semantics" as claim 10 recites. Instead, the cited portion describes:

"In addition, embodiments may provide for optionally storing a feature vector for texture, composition and structure. These attributes can be averaged across the N frames and the average for each attribute is stored as a searchable metric. In addition, optionally, the contrast of the frames may be enhanced using a contrast enhancement algorithm."

Clearly, this description is completely silent with respect to the recited features of claim 10.

Accordingly, the 35 USC §102(e) rejection of claim 10 is improper and should be withdrawn.

Claims 11-12, and 14-26 depend from claim 10 and are allowable over the cited combination by virtue of this dependency. Moreover, these dependent claims include additional features that are not anticipated by Hoffert.

For example, <u>claim 11</u> recites "generating one or more text feature vectors from the extracted one or more text features", and "wherein the making comprises making the one or more text feature vectors available for searching." In addressing this feature, the Action asserts that it is taught by Hoffert at col. 21, lines 17-22 and col. 18, lines 40-45. Applicant disagrees. Let's take a look at Hoffert col. 21, lines 17-22, which recites:

"The computation for each of the attributes is detailed below. This information can then be used for enhanced searching. For example, chrominance can be used for searching for black and white versus color video. In addition, embodiments may provide for optionally storing a feature vector for texture, composition and structure. These attributes can be averaged across the N frames and the average for each attribute is stored as a searchable metric. In addition,

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optionally, the contrast of the frames may be enhanced using a contrast enhancement algorithm."

This cited portion describes a feature vector for color video texture, composition and structure, not "text feature vectors from the extracted one or more text features", as claim 11 recites.

Now, let's take a look at the other cited portion of Hoffert asserted by the Action to describe this claimed feature. Hoffert at col. 18, lines 40-45, explicitly describes that a digital or audio file is classified as music, speech, or a combination of the two. Hoffert adds that additional processing and analysis can be performed on the music or speech to extract useful information. Clearly, this cited portion is completely silent with respect to any express or inherent description of "generating one or more text feature vectors from the extracted one or more text features", and "wherein the making comprises making the one or more text feature vectors available for searching", as claim 11 recites.

Accordingly, and for these additional reasons, the 35 USC §102(e) rejection of claim 11 should be withdrawn.

In another example, <u>claim</u> 17 recites "the associated text for a piece of media content comprises alternate text that can be displayed in place of the media content, and the one or more text features comprises one or more words of the alternate text." In addressing this feature, the Action asserts that it is taught by Hoffert at col. 5, lines 30-34. Applicant disagrees. Let's take a look at the cited portion of Hoffert.

"When the expand function is used, more text will be examined which is located near the media reference to see if there is a keyword match. Expanding the search repeatedly will decrease precision and increase recall. The narrow search button will do the reverse, by decreasing the lexical proximity value more and

more. A typical narrow function will decrease the lexical proximity value by a factor of two each time it is selected. The narrow search button will reduce the number of search results, and hone in on that text information which only surrounds the media reference directly. Narrowing the search will increase precision and decrease recall. The relevance of all resulting queries should be quite high, on average, as a search is narrowed using this method."

This cited portion describes an expand function is used to determine how proximal text can be with respect to a media reference for the text to be examined. Nearness of text to a media reference to qualify for examination does not describe "alternate text that can be displayed in place of the media content", as claim 17 recites. Clearly, this description is completely silent with respect to the feature of claim 17.

Accordingly, and for these additional reasons, the 35 USC §102(e) rejection of claim 17 should be withdrawn.

35 USC §103(a) Rejections

Claims 1-6, 27-30, 32, 34-35, and 39 stand rejected under 35 USC §103(a) as being unpatentable over U.S. Patent no. 6,510,406 to Marchisio in view of U.S. Patent serial no. 6,269,368 to Diamond. This rejection is traversed.

Claim 1 recites "receiving search criteria", "generating a query vector based on text features of the search criteria", "identifying non-text media content pieces to be rendered by: classifying the one or more of non-text media content as meaningful or not meaningful such that if a piece of the non-text media is an image, the image is determined to be meaningful as a function of one or more of a color histogram, size, and image semantics; and comparing the query vector to text feature vectors associated with a plurality of the media content pieces", "receiving

user feedback regarding the relevancy of the identified media content pieces", "modifying the query vector based on the user feedback", modifying one or more of the text feature vectors associated with the plurality of media content pieces based on the user feedback", and "identifying new media content pieces to be rendered by comparing the modified query vector to the text feature vectors, including the one or more modified text feature vectors, associated with the plurality of media content pieces." The cited combination of Marchisio in view of Diamond does not teach or suggest these claimed features.

In addressing claim 1, the Action asserts that Marchisio at col. 19, lines 10-13 and Fig. 12, describes "identifying media content pieces". Applicant disagrees. Examination of this particular clause of the claim as a whole shows that the features of this clause are not taught or suggested by Marchisio and/or Diamond. More particularly, Marchisio at col. 19, lines 10-13, describes:

"This mechanism allows the user to compare the content of a current document set to some earlier document set, and determine conceptual trends. Input to the semantic interpreter could be electronic text from the Web, an electronic database, or digitized speech from a speech recognizer."

Reviewing this cited portion, it describes comparison of document contents, conceptual trends, a semantic interpreter, and text from the Web, a database, or digitized speech. Nowhere does this description teach or suggest "identifying media content pieces to be rendered", as claim 1 recites.

Additionally, modifying Marchisio in view of Diamond does not cure this defect of Marchisio. The Action admits at page 12 that Marchisio and/or Diamond does not teach or suggest use of an image as media content. Moreover, it is respectfully submitted that not only does Marchisio in view of Diamond not teach

or suggest use of an image as media content, but that Marchisio in view of Diamond does not teach or suggest use of media content that is "non-text media", which as the specification describes can represent a variety of types of media content, such as images, audio, multimedia content, etc. Accordingly, the cited combination does not teach or suggest "identifying non-text media content pieces to be rendered", as claim 1 recites.

For this additional reason, the 35 USC §103(a) rejection of claim 1 over Marchisio in view of Diamond is improper and should be withdrawn.

Additionally, claim 1 recites further features that are not taught or suggested by Marchisio in view of Diamond. For example, claim 1 also recites "classifying the one or more of non-text media content as meaningful or not meaningful such that if a piece of the non-text media is an image, the image is determined to be meaningful as a function of one or more of a color histogram, size, and image semantics; and comparing the query vector to text feature vectors associated with a plurality of the media content pieces, the media content pieces being non-text media". Nowhere does the cited combination teach or suggest these claimed features.

Additionally, claim 1 recites other features that are not taught or suggested by Marchisio in view of Diamond. For example, claim 1 also recites "modifying one or more of the text feature vectors associated with the plurality of media content pieces based on the user feedback", and "identifying new media content pieces to be rendered by comparing the modified query vector to the text feature vectors, including the one or more modified text feature vectors, associated with the plurality of media content pieces." In addressing, the claimed "identifying

new media content pieces", the Action asserts (at page 8) that they are described by Marchisio at col. 7, lines 30-34, and Fig. 3. Applicant disagrees.

Marchisio at col. 7, lines 27-38, recites:

"At step 16, the disclosed system receives a user query from a user, consisting of a list of keywords or phrases. The disclosed system parses the electronic text included in the received user query at step 16. The parsing of the electronic text performed at step 16 may include, for example, recognizing acronyms, extracting word roots, and looking up those previously generated concept ID numbers corresponding to individual terms in the query. In step 17, in response to the user query received in step 16, the disclosed system generates a user query vector having as many elements as the number of rows in the term-spread matrix generated at step 9."

This cited portion explicitly describes how to create a user query vector by parsing a query to identify acronyms, word roots, and identifying any previous concepts associated with the query terms. Clearly, this cited portion teaches how to generate a query vector and does not teach or suggest "identifying new media content pieces to be rendered", as claim 1 recites. Additionally, and with respect to Fig. 3, Marchisio at col. 6, lines 1-2, explicitly describes that Fig. 3 describes feature extraction steps for term-document matrix formation. Thus, Fig. 3 does not teach or suggest "identifying new media content pieces to be rendered", as claim 1 recites. For the reasons already discussed above, modifying Marchisio in view of Diamond does not cure this additional defect of Marchisio.

For this additional reason, the 35 USC §103(a) rejection of claim 1 over Marchisio in view of Diamond is improper and should be withdrawn.

Moreover, at page 9 the Action admits that Marchisio does not teach or suggest "comparing the modified query vector to the text feature vectors, including the one or more modified text feature vectors, associated with the

plurality of media content pieces", as claim 1 recites. To provide this missing teaching, the Action combines Marchisio in view of Diamond. However, this combination does not teach or suggest the recited feature. The Action admits on page 12 that Marchisio in view of Diamond does not teach or suggest use of an image as media content. Thus, for the reasons already discussed above, the cited combination does not teach or suggest "identifying media content pieces to be rendered" wherein "the media content pieces being non-text media", as claim 1 recites. As a result, the cited combination does not teach or suggest does not teach or suggest "comparing the modified query vector to the text feature vectors, including the one or more modified text feature vectors, associated with the plurality of media content pieces", as claim 1 also recites.

For this additional reason, the 35 USC §103(a) rejection of claim 1 over Marchisio in view of Diamond is improper and should be withdrawn.

Claims 2-6 depend from claim 1 and are allowable over the cited combination by virtue of this dependency. Moreover, these dependent claims include additional features that are not anticipated by the combination of references.

For example, <u>claim 2</u> recites "generating another query vector based on one or more low-level features of the search criteria", "comparing the query vector to text feature vectors associated with the plurality of media content pieces to generate first results", "comparing the other query vector to other low-level feature vectors associated with the plurality of media content pieces to generate second results", and "combining, for one of the plurality of media content pieces, the first and second results corresponding to the one media content piece." In addressing

this feature, the Action at page 9 asserts that the "low-level features" are described by Marchisio at col. 17, lines 8-21. Applicant disagrees.

Marchisio at col. 17, lines 8-21, recites:

"At step 102, the disclosed system issues an initial search request, via a search engine, using an initial search query consisting of the initial term. At step 104, a plurality of terms that are related to the initial search query are received as search results from the search engine. These related terms may be, for example, sorted in decreasing order of correlation to the initial term. The disclosed system may attach a relevance level to each one of a predetermined number of the initial search result terms, the relevance level reflecting a correlation to the initial term, and these relevance levels may be displayed to the user. In an illustrative embodiment, the relevance levels reflect a lexical correlation between the initial term and each respective one of the initial search result terms."

This cited portion explicitly describes sorting and attaching relevance to search results. Clearly, this cited portion is completely silent with respect to "low-level features" in "search criteria". As Applicant's specification clearly defines, such "low-level features" are extracted from a non-text piece of media content such as an image, etc. The Action admits on page 12 that Marchisio and Diamond are completely silent with respect to any image media content. Thus, Marchisio is also be completely silent on any teaching or suggestion of such claimed "low-level features", as claim 2 recites.

For this additional reason, the 35 USC §103(a) rejection of claim 2 over Marchisio in view of Diamond is improper and should be withdrawn.

Claims 7-9, 31, 33, and 36-38 stand rejected under 35 USC §103(a) as being unpatentable over Marchisio in view of Diamond and further in view of Hoffert. This rejection is traversed.

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Claims 7-9 depend from claim 1. Claim 1 recites "modifying one or more of the text feature vectors associated with the plurality of media content pieces based on the user feedback", and "identifying new media content pieces to be rendered by comparing the modified query vector to the text feature vectors, including the one or more modified text feature vectors, associated with the plurality of media content pieces." Marchisio in view of Diamond are completely silent with respect to any teaching or suggestion of these claimed features. Additionally, and for the reasons already discussed above with respect to claim 10, Hoffert does not teach or suggest these claim features. Thus the features of claims 7-9 are allowable over the cited combination by virtue of this dependency.

Accordingly, the 35 USC §103(a) rejection of claims 7-9 is improper and should be withdrawn.

Claim 40 stands rejected under 35 USC §103(a) as being unpatentable over Marchisio in view of Hoffert. This rejection is traversed.

Claim 40 recites in part "a classifier module coupled to classify the one or more different types as meaningful or not meaningful such that if a piece of the one or more different types is an image, the image is determined to be meaningful as a function of one or more of a color histogram, size, and image semantics", "a feature extraction module coupled to extract, for a piece of the one or more different types and from the one or more of the media content pieces and as a function of whether text is determined to be meaningful, text comprising one or more keywords associated with the piece". The Action at page 12 admits that Marchisio does not describe media content that is an image. Additionally, for the resaons already discussed above with respect to the 25 USC §102(e) rejection of

claim 40 as anticipated by Hoffert, Hoffert does not teach or suggest these recited features. Thus, the cited combination does not teach or suggest these recited features.

Accordingly, the 35 USC §103(a) rejection of claim 40 over Marchisio in view of Hoffert is improper and should be withdrawn.

Claims 41-50 stand rejected under 35 USC §103(a) as being unpatentable over Diamond in view of Hoffert. This rejection is traversed.

Claim 41 recites in part "receive the query vector and compare the query vector to a plurality of feature vectors corresponding to a plurality of pieces of media content, wherein each of the plurality of feature vectors has been generated based on text associated with one of the plurality of pieces of media content and an indication that the one was classified as meaningful as a function of one or more of a color histogram, size, and image semantics". The Action at page 12 admits that Diamond does not describe media content that is an image. As a result, Diamond does not teach or suggest classifying media content as a function of "image semantics", as claim 41 recites. Additionally, for the reasons already discussed above with respect to the 25 USC §102(e) rejection of claim 40 as anticipated by Hoffert, Hoffert does not teach or suggest these recited features of claim 41. Thus, the cited combination does not teach or suggest these recited features.

Accordingly, the 35 USC §103(a) rejection of claim 41 over Diamond in view of Hoffert is improper and should be withdrawn.

Claim 42 recites "receiving search criteria", "identifying, based at least in part on the search criteria, a piece of media content to be rendered", "receiving,

after rendering of the piece of media content, user feedback regarding relevancy of the piece of media content", weighting for another piece of media content, based on the user feedback, both a result of comparing a high-level query vector to a high-level feature vector of the other piece of media content and a result of comparing a low-level query vector to a low-level feature vector of the other piece of media content", and "combining the weighted result to determine whether to identify the other piece of media content for rendering." Nowhere are these recited features taught or suggested by the recited combination.

Diamond, does not teach or suggest "comparing a low-level query vector to a low-level feature vector", as claim 42 recites. Applicant's specification clearly describes that "low-level features" are extracted from a non-text piece of media content such as an image, etc. The Action admits on page 12 that Diamond does not teach or suggest media content that is an image. Thus, Diamond also does not teach or suggest "combining the weighted result to determine whether to identify the other piece of media content for rendering", at least because the "weighted result" is based on "a low-level feature vector". Modifying Diamond in view of Hoffert does not cure these deficiencies.

More particularly, Hoffert describes at col. 21, lines 20-26 that a feature vector can be averaged across video frames to generate a searchable metric. Averaging a feature vector in involves adding and dividing operations, not comparing a feature vector to something else. Thus, such averaging is respectfully submitted not to teach or suggest "comparing a high-level query vector to a high-level feature vector of the other piece of media content and a result of comparing a low-level query vector to a low-level feature vector of the other piece of media content", and "combining the weighted result to determine whether to identify the

other piece of media content for rendering." For each of these reasons, Diamond in view of Hoffert does not teach or suggest the features of claim 42.

Accordingly, the 35 USC §103(a) rejection of claim 42 over Diamond in view of Hoffert is improper and should be withdrawn.

Claims 43-47 depend from claim 42 and are allowable over the cited combination by virtue of this dependency. Moreover, these dependent claims include additional features that are not anticipated by the combination of references.

Claims 51-54 stand rejected under 35 USC §103(a) as being unpatentable over Diamond in view of Hoffert and further in view of U.S. Patent No. 6,347,313 to Ma et al ("Ma"). This rejection is traversed.

Claim 51 recites "identifying a piece of media content to render to a user based at least in part on comparing a query vector corresponding to search criteria of the user and a feature vector corresponding to the piece of media content", "receiving user feedback regarding the relevancy of the piece of media content", "modifying the query vector based on the received user feedback", and "modifying the feature vector based on the received user feedback in an off-line log mining process." In addressing these features, the Action at page 19 admits that Diamond in view of Hoffert do not teach or suggest "the received user feedback in an off-line". To provide this missing feature, the Action modifies Diamond in view of Hoffert further in view of Ma to conclude that the claim is obvious. Applicant disagrees. The Action has not examined all features of the claim. In the particular clause addressed by the Action as requiring the combination of Ma, the Action has only addressed the feature of "the received user

 feedback in an off-line". However, this particular clause also recites "received user feedback in an off-line log mining process", (emphasis added). Nowhere do the cited references teach or suggest use of "an off-line log mining process", as Applicant claims.

Accordingly, the 35 USC §103(a) rejection of claim 51 over Diamond in view of Hoffert and further in view Ma is improper and should be withdrawn.

Claims 52-54 depend from claim 51 and are allowable over the cited combination by virtue of this dependency. Moreover, these dependent claims include additional features that are not anticipated by the combination of references.

For example, claim 52 recites "generating a vector U based on pieces of media content identified as relevant in the user feedback, and generating a new query vector D_{new} according to the following: $D_{new} = \eta U + (1-\eta)D$ where η represents a confidence in the vector U." In addressing this feature, the Action asserts that "the Examiner takes the position that the claimed relationship (see formula of claim 52) is in fact inherent in Marchisio." As a preliminary matter, claim 52 has not been indicated by the Action as being anticipated by or obvious in view of Marchisio. Thus, the Office has not presented a prima facie case for any anticipatory or obviousness rejection of claim 52.

For this reason alone, the 35 USC §103(a) rejection of claim 52 is improper and should be withdrawn.

Additionally, and with respect to the Action's assertion of inherency of the formula of claim 52, with which Applicant disagrees, the Action has not met the necessary evidentiary burden required to support a rejection based on inherency with respect a feature of claim 52 that is expressly missing from any of the cited

references. MPEP §2131 describes the burden that the Action needs to show when asserting that a characteristic not expressly disclosed in the reference is inherent. "[W]hen the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." (Emphasis added). With respect to necessarily present descriptive matter, the MPEP §2163 clearly states "[i]nherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient."

The Action's assertion that "the Examiner takes the position that the claimed relationship (see formula of claim 52) is in fact inherent in Marchisio" is not extrinsic evidence that "make[s] clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill."

For this additional reason, the 35 USC §103(a) rejection of claim 52 is improper and should be withdrawn.

Furthermore, to provide a missing feature of claim 52, the Action seemingly relies on personal knowledge without pointing to any specific teaching or suggestion. Specifically, the Action asserts a claimed feature "is in fact inherent in Marchisio". Since no extrinsic evidence is provided to support this assertion of inherency, the Action is seemingly relying on personal knowledge of the Examiner.

According to 37 CFR §1.104(d)(2), "[w]hen a rejection in an application is based on facts within the personal knowledge of an employee of the office, the

data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons."

In view of the above, if this rejection of claim 52 is maintained on a similar basis in a subsequent action, the Examiner is respectfully requested to supply such an affidavit subject to contradiction or explanation by the affidavits of the applicant and other persons to support this otherwise unsupported modification to Marchisio.

In another example, claim 53 recites "generating a vector V based on pieces of media content identified as irrelevant in the user feedback, and generating a new query vector D_{final} according to the following: $D_{final} = D_{new} * (1-V)$." In addressing this feature, and without pointing to any supporting reference or other extrinsic evident, the Action asserts that "as for the formula of the claim 53 is basically a calculating the difference between the value 1 and the adjusted vector." Thus, to provide a missing feature of claim 53, the Action injects the personal knowledge of the Examiner as being a person of ordinary skill in the art at the time of invention.

Again, according to 37 CFR §1.104(d)(2), "[w]hen a rejection in an application is based on facts within the personal knowledge of an employee of the office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons." If the rejection of claim 53 is maintained on a similar basis in a subsequent action, the Examiner is respectfully requested to

supply such an affidavit subject to contradiction or explanation by the affidavits of the applicant and other persons to support this otherwise unsupported modification by the Examiner to Diamond in view of Hoffert in view of Ma.

Conclusion

Pending claims 1-12, 14-26, 40-47, and 51-54 are in condition for allowance and action to that end is respectfully requested. Should any issue remain that prevents allowance of the application, the Office is encouraged to contact the undersigned prior or issuance of a subsequent Office action.

Respectfully Submitted,

Dated: 4/07/2005

By: Drian G. Hart

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